

## Regulatory Guide Periodic Review

Regulatory Guide Number: **4.19, Revision 0**

Title: **Guidance for Selecting Sites for Near-Surface Disposal of Low-Level Radioactive Waste**

Office/division/branch: **NMSS/DUWP/LLWB**

Technical Lead: **Eric H. Reber**

Staff Action Decided: **Reviewed with issues identified for future consideration**

### 1. **What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?**

RG 4.19, "Guidance for Selecting Sites for Near-Surface Disposal of Low-Level Radioactive Waste," was published in August 1988, to provide guidance on screening areas to identify a site or sites for near-surface disposal of low-level radioactive waste. While the text is applicable to the current regulations in 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," certain text is out-of-date and certain references to documents should be updated or removed.

For example, Appendix A, of 10 CFR Part 61, "Geographic Information Computer Mapping," is based on techniques and information technology that existed in 1988.

None of the following NUREGs referenced in the document appears on the lists of NRC's NUREGs found at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/>:

- NUREG-0902, "Site Suitability, Selection and Characterization"
- NUREG-1199, "Standard Format and Content of a License Application for a Low-Level Radioactive Waste Disposal Facility"
- NUREG/CR-2861, "Image Analysis for Facility Siting: A Comparison of Low- and High-Altitude Image Interpretability for Land Use/Land Cover Mapping"
- NUREG/CR-3247, "Site Characterization Information Using LANDSAT Satellite and Other Remote Sensing Data: Integration of Remote Sensing Data with Geographic Information Systems"
- NUREG/CR-3583, "Evaluation of Low-Altitude Remote Sensing Techniques for Obtaining Site Characteristic Information"

The lists of the NRC's NUREGs are not exhaustive, but the absence of these NUREGs from the lists indicates that the documents are not generally considered to be active regulatory documents. Furthermore, NUREG/CR-2861, NUREG/CR-3247, and NUREG/CR-3583 are not available in ADAMS. Such copies may be obtained by e-mailing at [DISTRIBUTION.Resource@nrc.gov](mailto:DISTRIBUTION.Resource@nrc.gov) requesting a copy.

As of September 2016, the NRC is evaluating whether to implement changes to the regulations on low-level waste disposal, including the regulations in 10 CFR 61.50, "Disposal site suitability requirements for land disposal," and Subpart C of Part 61,

“Performance Objectives,” for which RG 4.19 provides guidance. If these regulations will be revised as a result of the ongoing rulemaking effort, the staff may consider revision of RG 4.19 to address these changes.

The benefits to stakeholders of updating and consolidating all low-level waste guidance into one NUREG were identified during the programmatic assessment of the low-level radioactive waste regulatory program, which will be documented in a Commission paper that is in the final stages of concurrence. Activities within the Programmatic Assessment were prioritized as “high,” “medium,” or “low.” This activity was ranked as “medium.”

**2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?**

The NRC does not anticipate licensing a new near surface disposal facility under Part 61 within the next five years; therefore, not updating the RG to address the known issues would have essentially no impact on the NRC’s internal and external stakeholders. Also, RG 4.19 does not provide guidance that impacts inspection activities.

**3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?**

An estimate of the effort needed to correct the identified issues is between 0.10 full-time equivalent (FTE) and 0.20 FTE.

**4. Based on the answers to the questions above, what is the staff action for this guide?**

Reviewed with issues identified for future consideration.

**5. Provide a conceptual plan and timeframe to address the issues identified during the review.**

As discussed in Management Directive (MD) 6.6, “Regulatory Guides,” the NRC staff reviews RGs periodically to ensure that these guides continue to provide useful guidance. The staff will consider potential changes to 10 CFR Part 61 that may be brought about by the rulemaking effort during the next periodic review of the guide.

**NOTE: This review was conducted in September 2016 and reflects the staff’s plans as of that date. These plans are tentative and are subject to change.**